

NATURAL COMMUNITIES

Only habitat in an approximately natural state is classified as a natural community. For example, the many loblolly pine plantations in Bladen County are not regarded as natural communities, as they are quite different from the communities that would have occurred under natural conditions. A natural community is defined as a distinct and reoccurring assemblage of populations of plants, animals, bacteria, and fungi naturally associated with each other and their physical environment (Schafale and Weakley 1990). A natural community thus combines biological and habitat elements. Examples of natural community types in Bladen County include Wet Pine Flatwoods and Cypress–Gum Swamp. Differing landscape conditions can result in minor but consistent differences in the expression of a particular community type, and such consistent differences are recognized as community subtypes or variants. Examples of community variants in Bladen County include Pine/Scrub Oak Sandhill Mixed Oak Variant and Pine/Scrub Oak Sandhill Mesic Transition Variant. The structure and composition of each natural community type and variant are summarized in the descriptions of the natural areas contained in the SITE DESCRIPTIONS section of this report. The names of each natural community type and variant, and the sites at which each is located, are contained in Appendix 1. Natural community names and classification as used here are from Schafale (1994) and Schafale and Weakley (1990), except for three from Schafale in prep.: Sandhill Seep Very Wet Subtype, Sandhill Seep Wet Subtype, and Small Depression Pocosin Blueberry Subtype.

The prolific natural diversity of Bladen County is reflected in the high number of documented natural community types. Eighteen of these communities are associated with the longleaf pine and pocosin ecosystems of the Carolina bay region in the eastern part of the county, and in isolated occurrences elsewhere. Thirteen communities are found along the rivers, lakes, and wetlands of the county, and another five are associated with upland slopes, cliffs, and rock outcrops. The county also contains a special animal habitat known as the Colonial Wading Bird Rookery. Bladen County contains some of the best examples anywhere of several of these natural communities, including Bay Forest, High Pocosin, Low Pocosin, Natural Lake Shoreline, Peatland Atlantic White Cedar Forest, and Xeric Sandhill Scrub Sand Barren Variant.

Under natural conditions, longleaf pine communities have an open to moderate canopy that allows sunlight to reach the forest floor. Wetter habitats generally have little or no understory, while drier sites typically have a distinctive understory of scrub oaks. The shrub layer is open to patchy, and the ground layer of herbs and sprawling subshrubs is often dense, especially in wetter habitats. All of the pocosin communities have a dense shrub layer, and are distinguished from each other primarily by differences in the depth of organic soils, which regulates height of the shrubs, and density and height of the trees. The longleaf pine and pocosin communities are adapted to and in many ways dependent on fire, which is believed to have occurred naturally every three to five years throughout much of the longleaf pine region. Forests found on levees, floodplain swamps, low terraces, and slopes associated with rivers and streams rarely experience fire, and their canopies typically are dominated by hardwoods, or a mix of hardwoods and conifers, such as in the cypress–gum swamps. These canopies naturally are dense with limited sunlight reaching the forest floor during the growing season. Density of the understories, shrub layers, and ground layers varies from open and park-like on drier slopes and terraces to